

Claims:

1. A fibrinogen-based tissue adhesive, characterized in that it comprises an admixed elastase inhibitor.
2. A tissue adhesive according to claim 1, characterized in that the elastase inhibitor is selected from the group of eglin, elastase- $\alpha_1$ -proteinase inhibitor,  $\alpha_1$ -antiprotease, leukocyte protease inhibitor, elafin, or mixtures thereof.
3. A tissue adhesive according to claim 2, characterized in that the leukocyte protease inhibitor is provided as a leukocyte fraction, in particular a granulocyte-derived fraction.
4. A tissue adhesive according to any one of claims 1 to 3, characterized in that it is composed exclusively of human proteins.
5. A tissue adhesive according to any one of claims 1 to 4, characterized in that it is composed exclusively of human blood- or plasma proteins.
6. A tissue adhesive according to any one of claims 1 to 5, characterized in that the elastase inhibitor is contained in an amount ratio of from 1:100 to

1:150,000, preferably 1:500 to 1:110,000, based on mg of fibrinogen.

7. A tissue adhesive according to any one of claims 1 to 6, characterized in that at least  $10^{-6}$  U of elastase inhibitor are contained per g of fibrinogen, preferably between  $10^{-3}$  and 10 U/g of fibrinogen.

8. A tissue adhesive according to any one of claims 1 to 7, characterized in that it contains plasminogen in an amount of at least 0.0001 mg/mg of fibrinogen, preferably at least 0.001, most preferred more than 0.01.

9. A tissue adhesive according to any one of claims 1 to 7, characterized in that it does not contain any plasminogen.

10. A tissue adhesive according to any one of claims 1 to 9, characterized in that it further comprises a plasmin inhibitor or a plasmin activator inhibitor which preferably is selected from the group of aprotinin,  $\alpha_2$ -macroglobulin,  $\alpha_1$ -antitrypsin,  $\epsilon$ -aminocaproic acid, tranexamic acid, or mixtures thereof.

11. A tissue adhesive according to any one of claims

1 to 10, characterized in that it comprises an antibiotic which preferably is selected from the group of aminoglycosides, betalactams, polypeptides, phosphomycin, tetracyclines or mixtures thereof.

12. A tissue adhesive according to any one of claims 1 to 11, characterized in that it comprises factor XIII, preferably in an amount of at least 0.001 U/mg of fibrinogen, particularly preferred at least 0.1 U/mg.

13. A tissue adhesive according to any one of claims 1 to 12, characterized in that it is free from kininogenic proteins.

14. A tissue adhesive according to any one of claims 1 to 13, characterized in that it is present in combination with a solid surface as a fleece.

15. A tissue adhesive according to claim 14, characterized in that the solid surface is a collagen, gelatin or polysaccharide surface.

16. A tissue adhesive according to any one of claims 1 to 15, characterized in that in an environment of high fibrinolytic activity it is resistant to lysis for a period of time of at least 10 hours, preferably at least 15 hours.

17. A tissue adhesive according to any one of claims 1 to 16, characterized in that it is lyophilized.
18. A tissue adhesive according to any one of claims 1 to 16, characterized in that it is present in solution.
19. A tissue adhesive according to claim 18, characterized in that the solution is deep-frozen.
20. A tissue adhesive according to any one of claims 1 to 19, characterized in that it is present in virus-inactivated form.
21. A tissue adhesive according to any one of claims 1 to 20, characterized in that the elastase inhibitor is of recombinant origin.
22. A tissue adhesive system, characterized in that it comprises a tissue adhesive according to any one of claims 1 to 21 as one component thereof.
23. A tissue adhesive system according to claim 22, characterized in that it further comprises a component which comprises thrombin and, optionally, calcium.

24. A tissue adhesive system, characterized in that it comprises a fibrinogen component and a component which comprises an elastase inhibitor.

25. A tissue adhesive system according to claim 24, characterized in that the component which comprises an elastase inhibitor comprises thrombin.

26. A tissue adhesive system according to any one of claims 22 to 25, characterized in that it further comprises an application device for the component(s) of the system, in particular a double-syringe system.

27. The use of a tissue adhesive according to any one of claims 1 to 19 for producing a preparation to be applied in fields with high fibrinolytic activity, in particular in urology.

28. The use of a tissue adhesive sytem according to any one of claims 22 to 26 for producing an application device to be employed in fields with high fibrinolytic activity, in particular in urology.